

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claim 1, and add new claims 47-62, as follows:

Listing of Claims:

1-35. (Cancelled)

36. (Previously presented) A method for forming an antifuse, comprising:
forming a plurality of overlapping orthogonally arranged members; and
forming a dielectric interposed between the overlapping members to electrically isolate the overlapping members from one another at intersections thereof.

37. (Previously presented) The method of claim 36 wherein forming the overlapping orthogonally arranged members comprises:
forming a first interlayer;
forming a first plurality of openings in the first interlayer;
filling the first plurality of openings in the first interlayer with a first semiconductor material;
forming a second interlayer over the first interlayer;
forming a second plurality of openings in the second interlayer to expose the dielectric material;
filling the second plurality of openings in the second interlayer with second semiconductor material.

38. (Previously presented) The method of claim 36, further comprising forming a local interconnect and forming a contact plug on the local interconnect, a first set of the plurality of overlapping members formed concurrently with the local interconnect and a second set of the plurality of overlapping members formed concurrently with the contact plug.

39. (Previously presented) The method of claim 36 wherein forming the dielectric comprises forming the dielectric over a first set of the plurality of overlapping members, each member of the first set having at least one edge on which the dielectric is formed.

40. (Previously presented) A method for forming an antifuse, comprising:
forming a first electrode having a first plurality of longitudinal members;
forming a second electrode having a second plurality of longitudinal members, the second plurality of longitudinal members of the second electrode arranged substantially orthogonally with respect to the first plurality of longitudinal members of the first electrode, the second electrode overlying the first electrode and having portions extending between the first plurality of longitudinal members; and

forming a dielectric interposed between at least portions of the first and second electrodes.

41. (Previously presented) The method of claim 40 wherein forming the first electrode having a plurality of longitudinal members comprises forming a plurality of longitudinal members having at least one edge on which the dielectric and the longitudinal members of the second electrode are formed.

42. (Previously presented) The method of claim 41 wherein each of the longitudinal members of the first electrode have a rectangular profile.

43. (Previously presented) The method of claim 40 wherein forming the first electrode having a plurality of longitudinal members comprises forming a plurality of vertically oriented rectangular plates.

44. (Previously presented) The method of claim 43, further comprising:
forming a first interlayer;

forming a first plurality of slots in the first interlayer in which the first electrode is formed;

forming a second interlayer over the first interlayer; and

forming a second plurality of slots in the second interlayer in which the second electrode is formed.

45. (Previously presented) The method of claim 44, further comprising forming an isolation region on which the first electrode is formed.

46. (Previously presented) The method of claim 45 where in the first and second electrodes are formed from a tungsten material.

47. (New) A method for forming an antifuse, comprising:

forming a first electrode having a first plurality of parallel conductive members;

forming a second electrode having a second plurality of parallel conductive members over the first electrode and intersecting the first plurality of conductive members, the conductive members of the second plurality; and

forming a dielectric interposed between at least portions of the first and second electrodes.

48. (New) The method of claim 47 wherein forming the first electrode having a plurality of parallel conductive members comprises forming a plurality of conductive members having at least one edge on which the dielectric and the conductive members of the second electrode are formed.

49. (New) The method of claim 48 wherein each of the conductive members of the first electrode have a rectangular profile.

50. (New) The method of claim 47 wherein forming the first electrode having a plurality of parallel conductive members comprises forming a plurality of vertically oriented rectangular plates.

51. (New) The method of claim 50, further comprising:
forming a first interlayer;
forming a first plurality of slots in the first interlayer in which the first electrode is formed;
forming a second interlayer over the first interlayer; and
forming a second plurality of slots in the second interlayer in which the second electrode is formed.

52. (New) The method of claim 51, further comprising forming an isolation region on which the first electrode is formed.

53. (New) The method of claim 52 where in the parallel conductive of the first and second electrodes are formed from a tungsten material.

54. (New) A method for forming an antifuse, comprising:
forming a plurality of intersecting conductive members; and
forming a dielectric interposed between the intersecting conductive members to electrically isolate the intersecting members from one another at intersections thereof.

55. (New) The method of claim 54 wherein forming the intersecting conductive members comprises:
forming a first interlayer;
forming a first plurality of openings in the first interlayer;
filling the first plurality of openings in the first interlayer with a first conductive material;

forming a second interlayer over the first interlayer;
forming a second plurality of openings in the second interlayer to expose the dielectric material;
filling the second plurality of openings in the second interlayer with second conductive material.

56. (New) The method of claim 54, further comprising forming a local interconnect and forming a contact plug on the local interconnect, a first set of the plurality of intersecting conductive members formed concurrently with the local interconnect and a second set of the plurality of intersecting conductive members formed concurrently with the contact plug.

57. (New) The method of claim 54 wherein forming the dielectric comprises forming the dielectric over a first set of the plurality of conductive members, each member of the first set having at least one edge on which the dielectric is formed.

58. (New) A method for forming an antifuse, comprising:
forming a first plurality of parallel conductive members;
forming parallel trenches over the first plurality of parallel conductive members, the trenches exposing portions of the first plurality of parallel conductive members and having portions extending in between the first plurality of parallel conductive members;
forming dielectric layer over at least a portion of the exposed portions of the first plurality of parallel conductive members; and
forming a second plurality of parallel conductive members in the trenches and over the dielectric layer.

59. (New) The method of claim 58 wherein the first plurality of parallel conductive members are formed from a semiconductor material.

60. (New) The method of claim 58 wherein the first plurality of parallel conductive members and the parallel trenches are substantially perpendicular with respect to one another.

61. (New) The method of claim 58 wherein forming the first plurality of parallel conductive members is performed concurrently with formation of a local interconnect.

62. (New) The method of claim 58 wherein forming the second plurality of parallel conductive members is performed concurrently with formation of a contact plug.